UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/707,865	11/07/2000	Bengt Ebbeson	30882US1	1443

116 7590 05/17/2002

PEARNE & GORDON LLP
526 SUPERIOR AVENUE EAST
SUITE 1200
CLEVELAND, OH 44114-1484

EXAMINER
ATKINSON, CHRISTOPHER MARK

ART UNIT	PAPER NUMBER
3743	

DATE MAILED: 05/17/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

UNITED STATES DEPARTMENT OF COMMERCE
Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231

APPLICATION NUMBER	FILING DATE	FIRST NAMED APPLICANT	ATTORNEY DOCKET NO.

EXAMINER

ART UNIT	PAPER NUMBER
	8

DATE MAILED:

This is a communication from the examiner in charge of your application.
COMMISSIONER OF PATENTS AND TRADEMARKS

OFFICE ACTION SUMMARY

☑ Responsive to communication(s) filed on 1/14/02.

☑ This action is **FINAL**.

☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 D.C. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

☑ Claim(s) 1-19 is/are pending in the application.

Of the above, claim(s) 8-12, 15 and 17-19 is/are withdrawn from consideration.

☐ Claim(s) _____ is/are allowed.

☑ Claim(s) 1-7, 13-14 and 16 is/are rejected.

☐ Claim(s) _____ is/are objected to.

☐ Claims _____ are subject to restriction or election requirement.

Application Papers

☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.

☐ The drawing(s) filed on _____ is/are objected to by the Examiner.

☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.

☐ The specification is objected to by the Examiner.

☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).

☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been

☐ received.

☐ received in Application No. (Series Code/Serial Number) _____.

☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____.

☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

☐ Notice of Reference Cited, PTO-892

☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____

☐ Interview Summary, PTO-413

☐ Notice of Draftsperson's Patent Drawing Review, PTO-948

☐ Notice of Informal Patent Application, PTO-152

-- SEE OFFICE ACTION ON THE FOLLOWING PAGES --

Response to Remarks

Applicant's arguments filed 1/14/2002 have been fully considered but they are not persuasive.

Claims 8-12, 15 and 17-19 remain withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected species, there being no allowable generic or linking claim. Election was made **without** traverse in Paper No. 5.

Claim Rejections - 35 USC § 112

Claims 1-7, 13-14 and 16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Regarding claim 1, the recitation "said apparatus" is indefinite. It appears the above quoted recitation should be -- said unit -- since the "unit" has the limitations listed in claim 1 and not the apparatus.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. § 103 which forms the basis for all obviousness rejections set forth in this Office action:

> A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
>
> Subject matter developed by another person, which qualifies as prior art only under subsection (f) or (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention

was made, owned by the same person or subject to an obligation of assignment to the same person.

Claims 1-6, 13-14 and 16 are rejected under 35 U.S.C. § 103 as being unpatentable over Lavin et al. in view of Woolard et al. The patent of Lavin et al. discloses all the claimed features of the invention with the exception of the fin being profiled bodies.

The patent of Woolard et al. discloses that it is known to have profiled bodies between plates for the purpose of being able to induce a wide range of flow characteristics upon fluid flowing through the passageways. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to employ in Lavin et al. profiled bodies between plates for the purpose of being able to induce a wide range of flow characteristics upon fluid flowing through the passageways as disclosed in Woolard et al. It would have been obvious to one having ordinary skill in the art at the time the invention was made to have the specifically claimed material, since it has been held to be within the general skill of a worker in the art to select a known material on the basis of its suitability for the intended use as a matter of obvious design choice. *In re Leshin*, 125 USPQ 416. The bodies being double T-shaped is considered to be an obvious design choice in view of the I-shaped bodies disclosed in Woolard et al. which does not solve any stated problem or produce any new and/or unexpected result.

Claim 7 is rejected under 35 U.S.C. § 103 as being unpatentable over Lavin et al. in view of Woolard et al. as applied to claims 1-6, 13-14 and 16 above, and further in view of Opitz or Jacobi. The patent of Lavin et al. as modified, discloses all the claimed features of the invention

with the exception of the channels being circular.

The devices of Opitz and Jacobi disclose that it is known to have circular flow channels between two plates for the purpose of reducing the total pressure loss along the channel. It would have been obvious at the time the invention was made to a person having ordinary skill in the art to employ in Lavin et al. as modified, circular flow channels between the plates for the purpose of reducing the total pressure loss along the channel as disclosed in Opitz and Jacobi.

Response to Arguments

Applicant's concerns directed toward Lavin et al. are not found persuasive. The name "sorption unit" is a name only given to the claimed structural elements listed within the claim. Therefore, any device which meets the claimed structural limitations meets the claimed invention. Also, the recitation "sorption medium" is defined in the claim (i.e claim 1) as bodies (4) which have channels (6) therebetween. The functional recitations "for ..." have not been given patentable weight because they are narrative in form. In order to be given patentable weight, a functional recitation must be expressed as a "means" for performing the specified function, as set forth in 35 USC § 112, 6th paragraph, and must be supported by recitation in the claim of sufficient structure to warrant the presence of the functional language. *In re Fuller*, 1929 C.D. 172; 388 O.G. 279. Therefore, Lavin et al. teaches to have a body (14) with flow passages between plates (12) and having a porous coating which absorbs a working medium. Therefore, body (14) in Lavin et al. is a sorption body with flow passages since body (14) meets the structural claimed limitations. Woolard et al. discloses that it is known to have profiled bodies

(10,14) between plates for the purpose of being able to induce a wide range of flow characteristics upon fluid flowing through the passageways. Therefore, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to employ in Lavin et al. profiled bodies between the plates for the purpose of being able to induce a wide range of flow characteristics upon fluid flowing through the passageways as disclosed in Woolard et al.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher Atkinson whose telephone number is (703) 308-2603.

C.A.
May 16, 2002

CHRISTOPHER ATKINSON
PRIMARY EXAMINER